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## LIST OF ABBREVIATIONS

AAm	Acrylamide
AM	Antimicrobial
APS	Ammonium persulfate
FTIR	Fourier Transform Infrared Spectroscopy
FESEM	Field Emission Scanning Electron Microscope
MBA	N,N'-Methylenebisacrylamide
MgO	Magnesium oxide
NP	Nanoparticles
NACMC	Sodium carboxymethylcellulose
PAAm	Polyacrylamide
TEMED	N,N,N',N'-tetra-methylethylenediamine
XRD	X-ray diffraction

## LIST OF SYMBOLS

$R^2$	R-Square
$t$	Time
$S_t$	Swelling at time $t$
$S_e$	Equilibrium swelling
$W_t$	Weight at time $t$
$W_0$	Initial weight
$\tau$	Rate of swelling



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